

Claims

Claim 1 (original) Double burner for gas cookers, of the type provided with multiple concentric flame crowns, which comprises:

one head (T) with multiple concentric flame crowns;

one circular body (1) that contains partitions (9) used to define two different, not-communicating channels used to supply gas to the crowns of external flames (FE) and one channel (C) is used to supply gas to the central flames (FC);

two separate, not-communicating gas inlets (3 and 4) situated on the bottom of the body (1) used to supply gas to the aforementioned channels (C and E) selectively, the upper inlet (3) exactly ending in the centre of the body (1) and the lower inlet (4) going beyond the centre; burner characterised by the fact that a vertical channel (3a) branches off from the upper inlet (3), which is provided with the first gas nozzle (5) designed to introduce gas into the central channel (C) that supplies the central flames (FC), while a diverging pair of ascending channels (4a) branches off from the lower inlet, which is provided with nozzles (6) designed to introduce gas into the channel (E) that supplies the external flames (FE); it being provided that a Venturi chamber (5a) with vertical axis is situated downstream the nozzle (5), and a pair of Venturi chambers (6a) with inclined axis is situated downstream the pair of nozzles (6).

Claim 2 (currently amended) Burner as defined in ~~the preceding claim~~ claim 1, characterised by the fact that the head (T) is composed of a lower dish (7) and an upper dish (8, 80) that match perfectly, the lower dish (7) having a truncated conical shape and a stepped external border (7a) that acts as support and centering for the upper dish (8, 80), which is provided with a

stepped perimeter collar (8a) and finds a second support and centering in the flat flange (9a) situated at the top of the partition walls (9) that protrude from the centre of the body (1) and separate the channels (C and E).

Claim 3 (currently amended) Burner as defined in ~~the preceding claim~~ claim 2, characterised by the fact that the lower dish (7) and the upper dish (8, 80) feature semi-conduits (7b and 8b), respectively, which form the Venturi chambers (6a).

Claim 4 (currently amended) Burner as defined in ~~one or more of the preceding claims~~ claim 2, characterised by the fact that it comprises a V-shaped deflector wall (10) on the lower dish (7) situated downstream the chambers (6a), which favours the bifurcation of the air-gas flow coming from the chambers (6a), which is conveyed inside a semi-circular corridor (11) that feeds the concentric external flames (FC).

Claim 5 (currently amended) Burner as defined in ~~one or more of the preceding claims~~ claim 4, characterised by the fact that the head (T) comprises an annular cap (13) and a circular cap (14) used to close the corridor (11) and the Venturi chamber (5), respectively; it being provided that the dish (8) is provided with toothed crowns (12) shaped in such a way as to give a horizontal direction to the flames, together with the caps (13 and 14).

Claim 6 (currently amended) Burner as defined in ~~one or more of claims 1 to 8~~ claim 11, characterised by the fact that the head (T) comprises an annular cap (130) and a circular cap (140) that close the corridor (11) and the Venturi chamber (5), respectively; it being provided that the dish (80) has three toothed crowns (12) shaped in such a way as to give a vertically inclined direction to the flames, together with the caps (130 and 140).

Claim 7 (currently amended) Burner as defined in ~~one or more of the preceding claims~~
claim 1, characterised by the fact that it is provided with a hole (15) with vertical axis on the body
(1) in central position that starts from the lower gas inlet (4), moves up and ends in the coaxial
channel (3a) with the nozzle (5) and additionally characterised by the fact that the upper conduit (3)
is blocked in the presence of the hole (15).